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10/686,705	10/17/2003	Yuuji Sawanaga	243643US-2TTC	8805
22850 7590 08/22/2008 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER NGUYEN, TRAN N				
ART UNIT		PAPER NUMBER		
3626				
NOTIFICATION DATE		DELIVERY MODE		
08/22/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/686,705

**Applicant(s)**

SAWANAGA ET AL.

**Examiner**

Tran Nguyen

**Art Unit**

3626

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23, 25-31 and 33-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23, 25-31 and 33-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Notice to Applicant***

This communication is in response to the communication filed 06/26/2008.

Pending claim(s): 1-23, 25-31, 33-38. Cancelled claim(s): 24, 32. Non-elected claim(s): 39-48.

***Response to Amendment***

The declaration under 37 CFR 1.132 filed 06/26/2008 is insufficient to overcome the rejection of claims 1-23, 25-31, 33-38 based upon Applicant Admitted Prior Art (AAPA) applied under 35 USC 103 as set forth in the last Office action because:

As discussed in the Office Actions mailed 03/11/2008, 10/26/2007, 04/20/2007, it does not appear that the disclosure of what was "known" in the specification was restricted only to Japan.

In particular, the specification reads as follows: "it is also known, *in a general maintenance field*" (page 2 line 8, emphasis added).

Therefore, the cited portion does not limit what was known only to the inventor, but to what was known "in a general maintenance field" at the time the invention was made.

On page 1-2, paragraph 3, Declarant asserts "To our knowledge, the above-statement did not refer to information that was known or used by others in the United

States at the time of the invention or information contained in a publication in the United States, Japan, or another foreign country published at the time of the invention".

First, for the reason discussed above, the declaration is insufficient to overcome the presumption that the disclosed features were known "in a general maintenance field" at the time the invention was made.

Second, there is no requirement that AAPA be known by others in the United States or published in any country. The only requirement for AAPA to be considered so is an admission of prior art during prosecution.

Therefore, absent any credible explanation, Examiner hereby treats the cited portion of the specification as the work of another.

In particular, Declarant has failed to establish "a future expectancy is predicted based on measured values and an advance response is performed according to a comparison between the future expectancy and a predetermined reference value" as the work of the same inventive entity, and why such feature was not known "in a general maintenance field".

In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim(s) 1-4, 11-18, 23, 25-30, 33-34, 36-37 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Friz (5786994) in view of AAPA.

As per claims 1-2, Friz discloses a performance monitoring system for a laser medical imager in a medical facility connected to a performance monitoring system (46) (Abstract; col. 11 lines 44-65) comprising:

(a) a performance monitoring system for acquiring data representative of performance conditions, including errors, for the laser imager (Fig. 3, col. 3 lines 33-45, col. 8 line 61 to col. 9 line 11, col. 11 lines 44-65, col. 21 lines 33-49);

(b) memory in the performance monitoring system for storing the data representative of performance conditions for the laser imager (Fig. 3, col. 11 line 44 to col. 12 line 21);

(c) system (46) for logging the frequency of errors (col. 15 lines 34-61 ); and

(d-e) system (46) for comparing the frequency of each type of error to a threshold, wherein if the frequency of a particular error exceeds the threshold, system (46) recognizes a potential oncoming fault condition and automatically initiates an order for a service technician to visit the location associated with the particular laser imager and visually displaying a report on a panel of the errors for a laser imager user (col. 12 lines 13-21; col. 15 lines 34-61).

Friz further discloses the performance monitoring system connecting to laser imagers over public telephone lines (col. 11 lines 20-44), a second reception unit connected to the network configured to receive a reference request for the expectancy from a requester; and a providing unit connected to the network configured to allow the requester to refer to information of the expectancy based on the received reference request (see col. 12 lines 16-21), and an informing unit configured to issue a notice to the medical facility through the network according to the value of the expectancy (see col. 12, lines 13-21; col. 15, lines 34-61).

Friz does not expressly disclose a prediction unit configured to calculate an expectancy of the parameter data to be received in the future based on the stored parameter data. Fritz suggests that the system anticipates conditions that could render a laser imager unusable (col. 15 lines 34-61).

However, Applicant's Background of the Invention admits that this is well known in the art. See Applicant's specification, lines 8-11, "Still further, it is also known, in a general maintenance field, that a future expectancy is predicted based on measured values and an advance response is performed according to a comparison between the future expectancy and a predetermined reference value."

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the features of Applicant's Background of the Invention within the system of Friz with the motivation of enabling a greater degree of anticipation of conditions that could render the laser imager unusable and proactively initiating a service call (Friz; col. 15 lines 54-61).

As per claim 3, Friz discloses comparing the number of errors to a threshold (col. 15 lines 46-60). For the teaching of "the expectancy," it is noted that Applicant teaches this limitation in the Background of the Invention as being well known in the art. See the teaching of "an advance response is performed according to a comparison between the future expectancy and a predetermined reference value." See Applicant's specification, lines 8-11.

As per claim 4, Friz discloses a threshold including an upper threshold level (reference line (82)) and lower threshold level (reference line 84)) of the parameter data (Fig. 4-6c, col. 4 lines 12-41, col. 10 lines 31-58, col. 12 lines 38-65, col. 13 line 64 to col. 14 line 26).

As per claims 11, Applicant's Background of the Invention discloses the prediction unit calculates the expectancy by statistically analyzing the stored parameter data (page 2, lines 3-11).

As per claims 12-13, Friz discloses the parameter data representing a characteristic regarding a part of the medical equipment at each of a plurality of times and the parameter data is given for each of a plurality of parts of the medical equipment (Fig. 4- 9).

As per claims 14-15, Friz discloses receiving and calculating data at a predetermined time (i.e., when the number of errors exceeds a threshold) (Fig. 4-9, col. 15 lines 33-60).

As per claims 16-17, Friz discloses providing data and reports through a telecommunications network (col. 11 lines 45-65). See the rejection of claim 1 for a discussion of "the expectancy."

As per claim 18, Friz discloses data being provided through electronic mail (col. 11 line 65 to col. 12 line 21). It is noted that electronic mail is provided through an Internet web site. See the rejection of claim 1 for a discussion of "the expectancy."



As per the set of claim(s): 23, this set of claim is rejected for substantially the same rationale as applied to the rejection of the set of claim(s): 1, respectively, and incorporated herein.

As per claim 25, Friz discloses a technician generating a report and storing the report onsite in a file stored in a computer memory device (col. 10 lines 32-36), wherein the technician uses the reports to determine whether parameters fall within the applicable tolerances established for the references to assess image quality (col. 10 lines 32-58) (reads on "the requestor is a computer provided in a local maintenance provider which provides maintenance for the medical equipment").

As per claim 26, Friz discloses a processor and laser imager in a medical facility (Fig. 3, col. 11 line 66 to col. 12 line 22).

As per claim 27, Friz discloses a processor associated with the performance monitoring system (Fig. 3, col. 6 line 55 to col. 7 line 4, col. 11 line 66 to col. 12 line 22).

As per claim 28, Friz discloses the informing unit issuing the notice allowing a reference of a graph which shows the stored parameter data and the expectancy with the first and second threshold levels in chronological order, wherein the stored parameter data and the expectancy are shown in a distinguishable manner (Fig. 4-6c,

col. 4 lines 12-41, col. 10 lines 31-58, col. 11 line 66 to col. 12 line 21, col. 12 lines 38-65, col. 13 line 64 to col. 14 line 26).

As per the set of claim(s): 29, 30, 33, 34, this set of claim is rejected for substantially the same rationale as applied to the rejection of the set of claim(s): 1/14/15, 14/15, 1, 1, respectively, and incorporated herein.

As per the set of claim(s): 36, this set of claim is rejected for substantially the same rationale as applied to the rejection of the set of claim(s): 1, respectively, and incorporated herein.

In particular, Friz discloses a laser imager and processor (reads on "medical facility apparatus") and a remote performance monitoring system (reads on "a medical equipment management apparatus") (see Figure 3).

As per the set of claim(s): 37, this set of claim is rejected for substantially the same rationale as applied to the rejection of the set of claim(s): 1, respectively, and incorporated herein.

In particular, Friz discloses a laser imager and processor (reads on "medical facility apparatus") and a remote performance monitoring system (reads on "a medical equipment management apparatus") (see Figure 3). Friz further discloses a user receiving an email on a computer for receiving reports about errors occurring on a laser imager (Fig. 3, col. 11 line 66 to col. 12 line 21).

Claim(s) 5-9 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Friz in view of AAPA as applied to parent claim 3 above, and further in view of Ridolfo (6735549).

As per claim 5, Friz and Applicant's Background of the Invention fail to expressly disclose the predetermined threshold includes an upper threshold level and a bottom threshold level of the parameter data.

Ridolfo discloses component monitoring utilizing alarm/alert limits using thresholds, bands, and frequency filters (col. 5 lines 62-67). It is noted that using bands and thresholds are considered to be a form of "an upper threshold level and a bottom threshold level of the parameter data."

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the features of Ridolfo within the system of Friz and Applicant's Background of the Invention with the motivation of ensuring that equipment is repaired, refurbished, or replaced before the equipment fails (Ridolfo; col. 5 lines 7-14) and allowing data gathered on system components to be compared to expected regions of operation for the monitored components (Ridolfo; col. 5 lines 63-67).

As per claims 6-7, Friz discloses the informing unit issuing the notice allowing a reference of a graph which shows the stored parameter data and the expectancy with the first and second threshold levels in chronological order, wherein the stored

parameter data and the expectancy are shown in a distinguishable manner (Fig. 4-6c, col. 4 lines 12-41, col. 10 lines 31-58, col. 11 line 66 to col. 12 line 21, col. 12 lines 38-65, col. 13 line 64 to col. 14 line 26).

As per claims 8-9, Friz discloses issuing notices to electronic mail addressees and issuing reports of errors when a parameter exceeds a threshold as discussed in the rejection of claim 1. Friz does not expressly disclose having multiple thresholds and changing addresses and the content of messages based on the thresholds. The Examiner respectfully submits that utilizing multiple thresholds (i.e., ranges) and messaging and changing content based on which range the data falls into are well known in the art of programming, and one skilled in the art would have been motivated to modify the teachings of Friz and Applicant's Background of the Invention to include these features in order to ensure that the proper service technician is notified (Friz; col. 15 lines 33-60).

Claim(s) 10 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Friz in view of AAPA and Ridolfo as applied to parent claim 9 above, and further in view of Kucek (6832199).

As per claim 10, Friz discloses messaging a service provider when the number of errors exceeds a threshold (col. 15 lines 33-61) (reads on "urgent"). Friz and Applicant's Background of the Invention fail to expressly disclose the first content representing a

necessity of a maintenance service for the medical equipment without urgency. Kucek discloses sending non-urgent messages to a service center and field engineer (col. 3 lines 4-40). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the features of Kucek within the system of Friz and Applicant's Background of the Invention with the motivation of distinguishing between urgent and non-urgent messages.

Claim(s) 19-22 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Friz in view of AAPA as applied to parent claims 1-3 above, and further in view of Babula (6381557).

As per claims 19-22, Friz and Applicant's Background of the Invention fail to expressly disclose a second storage unit configured to store maintenance contract information of the medical equipment, wherein the determination unit determines the level based on the stored maintenance contract information, and wherein the stored maintenance contract information is changed by an external terminal connected to the apparatus through the network.

Babula discloses a second storage unit configured to store maintenance contract information of the medical equipment, wherein the determination unit determines the level based on the stored maintenance contract information, and wherein the stored maintenance contract information is changed by an external terminal connected to the apparatus through the network (col. 2 lines 10-32, col. 13 line 54 to col. 14 line 37, col. •

21 line 48 to col. 23 line 24). Babula discloses transmitting a service request (col. 26 lines 11-23). As per the recitation of "the level," see the discussion in rejection of claim 1. As per the recitation of "the notice," see the discussion in rejection of claim 1.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the features of Babula within the apparatus taught collectively by Friz and Applicant's Background of the Invention with the motivation of tracking licensing information between service providers and providers of medical diagnostic and imaging systems (Babula; col. 1 lines 27-40 and col. 2 lines 1-32).

Claim(s) 31, 35, 38 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Ridolfo in view of AAPA.

As per claim 31, Ridolfo discloses a system comprising:

(a) a sensor system for monitoring a parameter indicative of an operating condition of at least one of the components in the system and an equipment failure and degradation module that receives an input from the sensor system (Fig. 2, col. 4 line 32 to col. 5 line 14, col. 12 lines 44-53);

(b) a digital computer for processing the measurements of the parameters (Fig. 2, col. 4 line 32 to col. 5 line 24, col. 12 lines 44-53) (It is respectfully submitted that a digital computer processing data must store the data in memory to process the data (Fig. 2));

(c) an equipment failure and degradation module of a digital computer to predict if any equipment is in danger of failing and to predict the remaining equipment life by analyzing the measurements and processing the collected data sets using trend analysis, wherein the trend analysis monitors changes in selected measurement parameters over time and predicts if the equipment is in danger of failing (col. 4 line 66 to col.5 line 29, col. 12 lines 40-63);

(d) a date-of-failure predictor module that determines and displays the date that a failure in the monitored component will likely occur prior to a probability, wherein the date-of-failure predictor module determines the date that a failure in the monitored component will likely occur for the specified probability from a failure distribution model for the monitored component developed by the equipment failure degradation module by performing a comparison to a probability of failure percentage, predetermined by a user, and existing within the module upon entry by the user (col. 4 line 66 to col. 5 line 29, col. 11 lines 8-25, col. 12 lines 40-63);

(e) a workstation for receiving a request for a date from the workstation (Fig. 2(10), col. 10 line 64 to col. 11 line 25, col. 12 lines 40-56); and

(f) a digital computer for calculating the date using a date-of-failure predictor module (Fig. 2(10), col. 10 line 64 to col. 11 line 25, col. 12 lines 40-56).

(g) software capable of displaying the date on a computer (Figure 2 label 10).

Ridolfo further discloses that each element is connected to a network (see column Fig. 2).

As per the recitation "medical equipment provided in a medical facility," Ridolfo does not expressly disclose this feature.

Applicant's Background of Invention discloses medical equipment provided in a medical facility (page 1, lines 19-26).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the features of Applicant's Background of the Invention within the system of Ridolfo with the motivation of ensuring that equipment is repaired, refurbished, or replaced before the equipment fails (Ridolfo; col. 5 lines 7-14).

As per the set of claim(s): 35, 38, this set of claim is rejected for substantially the same rationale as applied to the rejection of the set of claim(s): 31, respectively, and incorporated herein.

In particular, Ridolfo discloses issuing a notice to a workstation according to a date (Fig. 2, 10, col. 10 line 64 to col. 11 line 25).

### ***Response to Arguments***

Applicant's arguments filed 06/26/2008 have been fully considered but they are not persuasive.

As per claim 1 and the Declaration under 37 CFR 1.132, Applicant's arguments on page 15-16 merely rehash arguments previously addressed in the Office Actions



mailed 03/11/2008, 10/26/2007, 04/20/2007, and incorporated herein. See the section above for a discussion of the Declaration.

Applicant is invited to contact Examiner to discuss suggestions to overcome this rejection.

As per claims 33-34, 36-37, Applicant's arguments on page 16 merely rehash arguments previously addressed above, and incorporated herein.

As per claims 31, 35, 38, on page 17 Applicant argues that the applied art do not teach "a notice".

Applicant provides no definition for "notice".

In determining the scope of the claim, Examiner relies on Merriam-Webster Online Dictionary, which defines "notice" as "the act of announcing or of being announced".

The entire purpose of Ridolfo's invention is to leverage technology (Figure 2) to predict future equipment failure (Abstract). Ridolfo teaches further teaches displaying the predicted failure date (Figure 10 label 81).

Based on the definition afforded by Merriam-Webster Online Dictionary, Examiner considers displaying the predicted failure date to be "a notice".

On page 17 Applicant further argues that the applied art do not teach "a second computer".

Applicant has not clarified if the "second computer" is the same computer as the "first computer", or if these limitations recite separate and distinct computers.

Examiner submits that a single computer reasonably fully meets both limitations because Applicant has not set forth a separate and distinct "second computer".

Assuming *arguendo* that this limitation flows inherently therefrom, Ridolfo teaches the predicted failure date is used to make a plurality of decisions affecting the entire plant (column 11 line 8-25). Therefore, Examiner submits that it would have been desirable to share the results with a plurality of employees.

Additionally, Ridolfo teaches that network communication is well within the level of ordinary skill in the art (Figure 2).

Therefore, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to share the result with multiple computers. In re Dulberg, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran (Ken) N. Nguyen whose telephone number is 571-270-1310. The examiner can normally be reached on Monday - Friday, 9:00 am - 5:00 pm Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, C. Luke Gilligan can be reached on 571-272-6770. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. N./  
Examiner, Art Unit 3626  
08/15/2008

/C Luke Gilligan/  
Supervisory Patent Examiner, Art Unit 3626